## ADJUTANT AND INSPECTOR GENERAL'S OFFICE, Richmond, July 28, 1863.

GENERAL ORDERS, No. 104.

I. Officers of engineer troops having been selected for appointment, with special reference to their qualifications as engineers, will be respected as such, and their duties, when serving in the field, camp or cantonment, will embrace all that are enumerated in paragraph III, General Orders, No. 90, current series, "as the duties of officers of engineers serving with armies of the Confederate States."

II. On the march engineer troops will serve as pioneers, constructing and repairing roads and bridges, and removing impediments to the advance of our forces, or delaying the enemy, by breaking up roads, destroying bridges, and otherwise obstructing his communications. will also be employed in making rapid reconnoissances and surveys of the country occupied or marched over by the army; preparing sketches and maps of the roads and topographical features; laying out camps, and entrenching military positions. During battle they will be held in reserve, and used as circumstances may demand, either in their special duties, or as infantry. Under the command of their officers, they may be employed in the construction of ovens for baking bread, and other works requiring mechanical skill, but not on mere police duty, or the like. unless connected immediately with their own organization: nor are they to be employed altogether on mere fatigue service-but, once instructed in the duties of the engineer soldier, they will be frequently employed in laying out works, and also in aiding and directing the labors of other troops detailed for their construction.

III. Whenever practicable, engineer troops will be drilled and instructed in the duties of engineer soldiers, by battalions and regiments—and to this end, all the companies serving with an army will be habitually kept together: but such temporary assignments of companies to divisions or otherwise, will be made by the Commanding General, as will, in his judgment, best comport with the interests of the service. The Ordnance department will furnish light arms to these troops; but until they can be supplied, infantry muskets will be used. Entrenching tools and other implements will be issued by the Engineer department.



IV. Each company of the engineer troops shall be provided by the Quartermaster's department with at least two wagons and teams of four animals each, for transportation of company equipage, entrenching tools and other implements; one ambulance or other light vehicle, with a team of two horses, for carrying surveying instruments, stationery, maps, drawing boards and other fixtures; and twelve additional horses, with saddles, bridles and harness, to be used by the officers and non-commissioned officers in making rapid examinations of country, or for hauling materials needed for prompt repair and construction of bridges, roads and other works.

V. When officers of the corps of engineers and of engineer troops are engaged on the same service, the senior officer present shall control in all questions relating to the location and construction of defences, and to engineering works generally connected with the army, unless for special reasons it be decided otherwise by the commanding officer: but should the recommendations and plans of a junior officer be adopted, the directions of the commander will not be communicated through him to the senior engineer officer, whether of the corps or troops, but through the usual channel of orders. Officers of the corps of engineers will not assume the command of engineer troops. In all cases they will be under the command of their own officers.

By order.

S. COOPER,

Adjutant and Inspector General.